

Chesterfield, 1 piece

SOUND ABSORPTION AREA ACCORDING TO ISO 354 AND SS 25269

Measurement of sound absorption area in a reverberation room



Report number:
18-051-M5
Date
2018-04-03

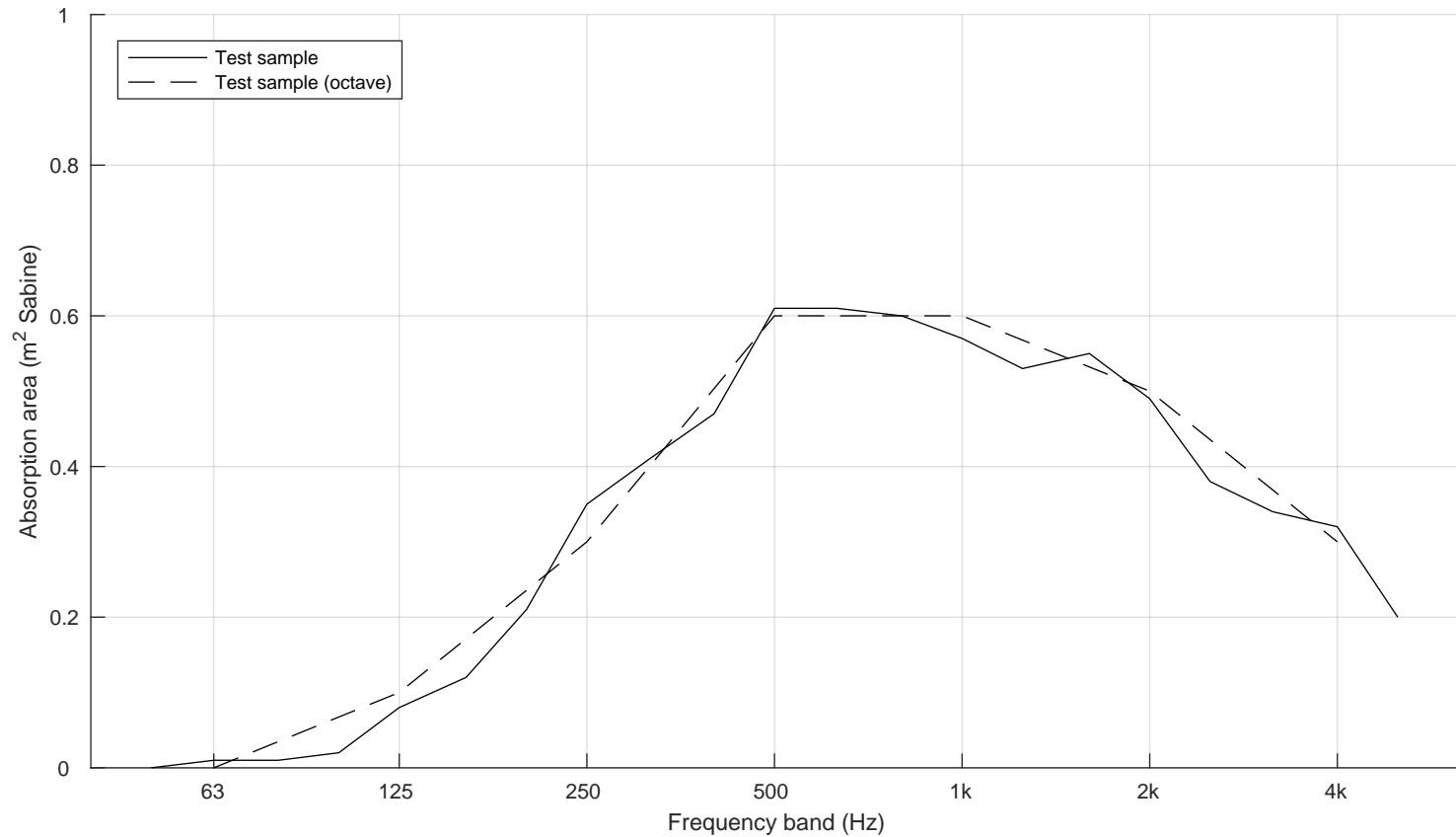
Frequency f [Hz]	Sound absorption area [m ² Sabine]	
50	0.00	
63	0.01	0.0
80	0.01	
100	0.02	
125	0.08	0.1
160	0.12	
200	0.21	
250	0.35	0.3
315	0.41	
400	0.47	
500	0.61	0.6
630	0.61	
800	0.60	
1000	0.57	0.6
1250	0.53	
1600	0.55	
2000	0.49	0.5
2500	0.38	
3150	0.34	
4000	0.32	0.3
5000	0.20	

Client: Johanson Design
 Manufacturer: Johanson Design
 Product identification: Chesterfield

Description of test specimen: Wall absorbent with metal frame and 40 mm mineral wool dressed in fabric with a metal grid to create a surface pattern.
 Size: 600 x 600 x 40 mm.
 Mounted directly on floor (Type A).
 The scaling of the graph deviates from ISO 354 to increase readability.

Reverberation room volume: 200 m³
 Temperature: 21.0 °C (empty: 22.0 °C)
 Air humidity: 30% (empty: 30%)
 Air pressure: 100.1 kPa (empty: 100.1 kPa)
 Number of specimens: 5

Measurement date: 2018-03-20
 Measured by: Anders Grimmehed



$N_{10} = 33$

Chesterfield, 6 pieces

SOUND ABSORPTION AREA ACCORDING TO ISO 354 AND SS 25269

Measurement of sound absorption area in a reverberation room



Report number:
18-051-M10
Date
2018-06-12

Frequency f [Hz]	Sound absorption area [m ² Sabine]	
50	0.07	
63	0.10	0.1
80	0.14	
100	0.21	
125	0.61	0.6
160	0.91	
200	1.23	
250	1.42	1.6
315	2.00	
400	2.37	
500	2.59	2.6
630	2.96	
800	2.87	
1000	2.77	2.7
1250	2.52	
1600	2.57	
2000	2.47	2.5
2500	2.43	
3150	2.45	
4000	2.17	2.3
5000	2.40	

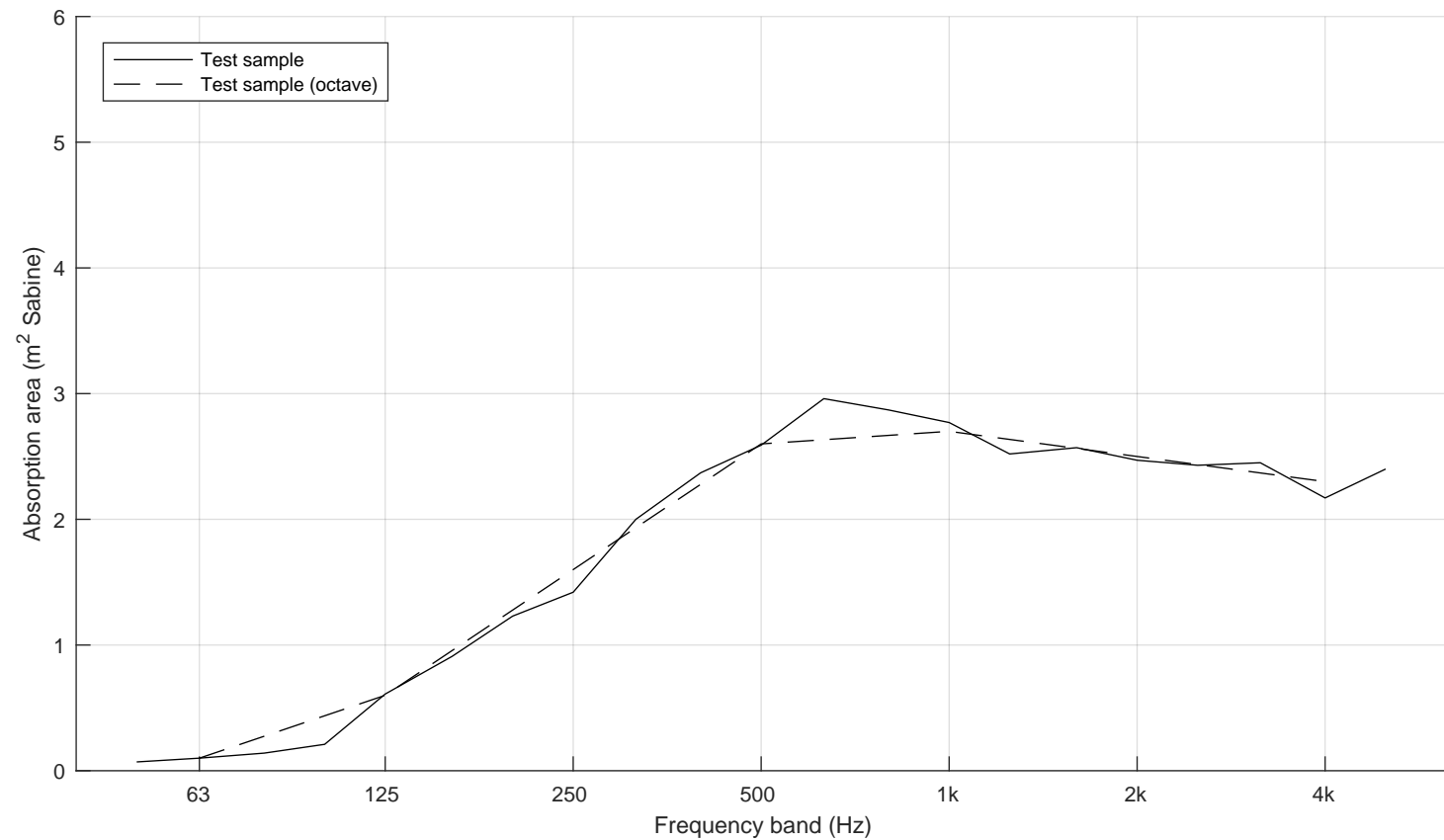
Client: Johanson Design
 Manufacturer: Johanson Design
 Product identification: Chesterfield

Description of test specimen: Wall absorbent with metal frame and 40 mm mineral wool dressed in fabric with a metal grid to create a surface pattern.
 Size (6 pcs): 1800 x 1200 x 40 mm.
 Mounted directly on floor (Type A).

Reverberation room volume: 200 m³
 Temperature: 20.6 °C (empty: 20.6 °C)
 Air humidity: 56 % (empty: 58 %)
 Air pressure: 98.1 kPa (empty: 98.1 kPa)
 Number of specimens: 1

Measurement date: 2018-06-11
 Measured by: Carl Nyqvist

$$N_{10} = 4.3$$



Chesterfield 10m²

SOUND ABSORPTION COEFFICIENT ACCORDING TO ISO 354 AND ISO 11654

Measurement of sound absorption coefficient in a reverberation room



Report number:
18-051-M1
Date
2018-04-03

Frequency f [Hz]	Sound absorption coefficient	
	α_s	α_p
50	0.02	
63	0.03	0.05
80	0.05	
100	0.10	
125	0.19	0.20
160	0.35	
200	0.51	
250	0.62	0.70
315	0.90	
400	1.07	
500	1.11	1.00
630	1.23	
800	1.20	
1000	1.19	1.00
1250	1.13	
1600	1.15	
2000	1.13	1.00
2500	1.15	
3150	1.06	
4000	1.10	1.00
5000	1.10	

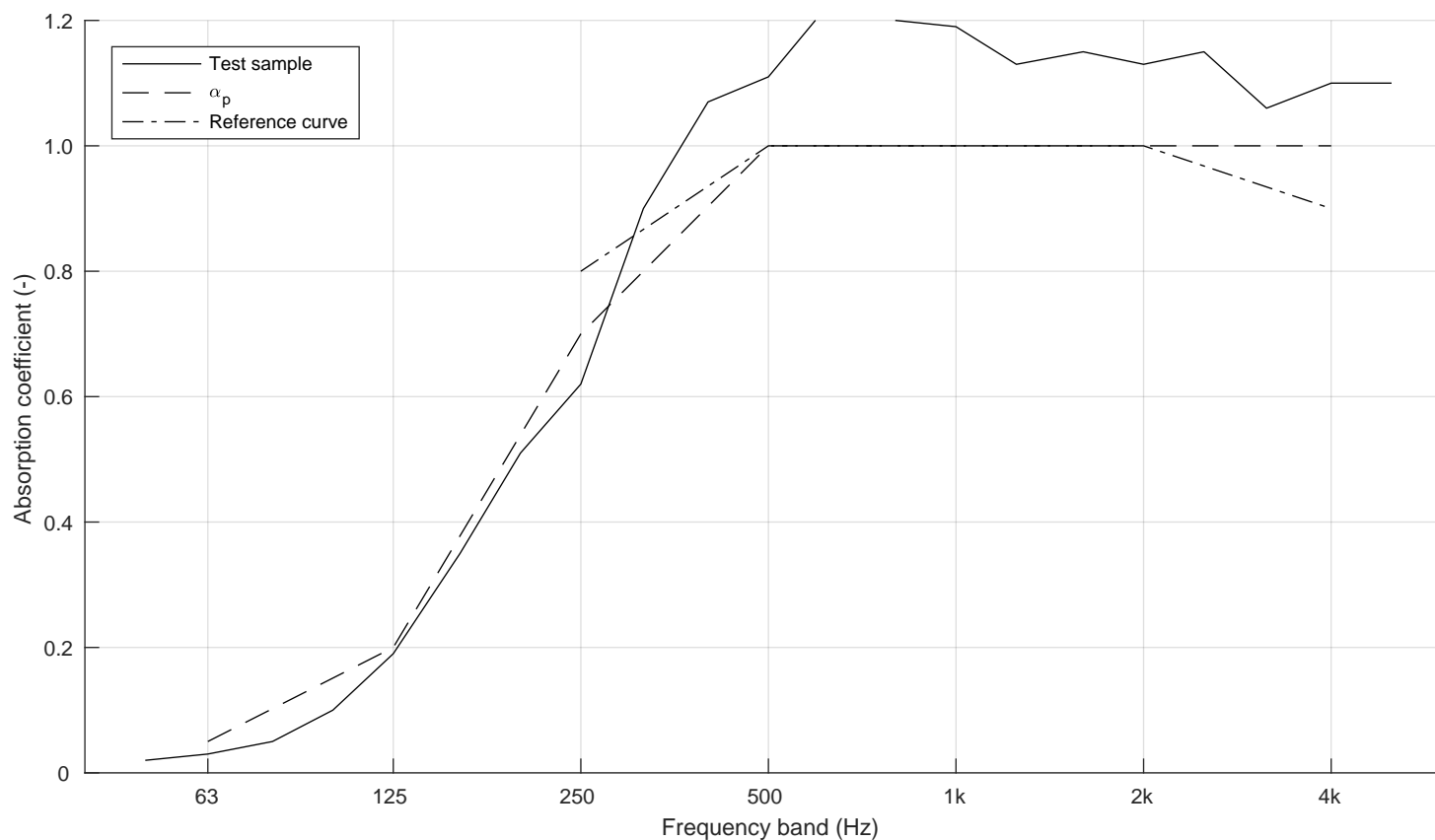
Client: Johanson Design
Manufacturer: Johanson Design

Product identification: Chesterfield

Description of test specimen: Wall absorbent with metal frame and 40 mm mineral wool dressed in fabric with a metal grid to create a surface pattern.
Thickness 40 mm.
Mounted directly on floor (Type A).

Reverberation room volume: 200 m³
Temperature: 22.0 °C (empty: 22.0 °C)
Air humidity: 30 % (empty: 30 %)
Air pressure: 100.1 kPa (empty: 100.1 kPa)
Size of specimen: 10.44 m²

Measurement date: 2018-03-20
Measured by: Anders Grimmehed



$\alpha_w = 1.00$

Absorption class = A